## **WE CLAIM**

1. A composition of the formula:

$$\bigcap_{R} \bigcap_{N} \bigcap_{OH} O \bigcap_{SiR^2R^3R^4}$$

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wherein R is H or CH<sub>3</sub>, R<sup>1</sup> is selected from H, substituted and unsubstituted alkyl groups having 1 to 8 carbon atoms, substituted and unsubstituted benzene and toluene groups and

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and  $R^2$ ,  $R^3$  and  $R^4$  are independently selected from alkyl groups having 1 to 8 carbon atoms, substituted and unsubstituted benzene and toluene groups, and  $-OSiR^5R^6R^7$  wherein  $R^5$ ,  $R^6$  and  $R^7$  are independently selected from the group consisting of straight or branched alkyl groups having 1 to 4 carbon atoms.

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- 2. The composition of claim 1 wherein R<sup>3</sup> is CH<sub>3</sub> and R<sup>2</sup> and R<sup>4</sup> are -OSiR<sup>5</sup>R<sup>6</sup>R<sup>7</sup>.
- 3. The composition of claim 1 wherein at least two of R<sup>2</sup>, R<sup>3</sup> and R<sup>4</sup> are -OSiR<sup>5</sup>R<sup>6</sup>R<sup>7</sup>

- 4. The composition of claim 1 wherein R<sup>2</sup>, R<sup>3</sup> and R<sup>4</sup> are selected from alkyl groups having 1-4 carbon atoms.
  - 5. The composition of claim 1 having the formula

$$\begin{array}{c|c} O \\ O \\ N \\ H \end{array} \begin{array}{c} O \\ Si \\ CH_3 \\ O \\ OSi(CH_3)_3 \end{array}$$

6. The composition of claim 1 having the formula

5  $\begin{array}{c} \text{(CH}_3)_3\text{SiO} \\ \text{CH}_3 - \text{Si} \\ \text{(CH}_3)_3\text{SiO} \\ \end{array} \begin{array}{c} \text{OSi(CH}_3)_3 \\ \text{OH} \\ \end{array} \begin{array}{c} \text{OSi(CH}_3)_3 \\ \text{OSi(CH}_3)_3 \\ \end{array}$ 

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7. A polymer formed from a reaction mixture comprising at least one hydrophilic monomer, at least one silicone containing component and at least one (meth)acrylamide monomer of the formula:

$$\bigcap_{R} \bigcap_{N \text{ OH}} \bigcap_{OH} \bigcap_{SiR^2R^3R^4}$$

wherein R is H or CH<sub>3</sub>, R<sup>1</sup> is selected from H, substituted and unsubstituted alkyl groups
15 having 1 to 8 carbon atoms, substituted and unsubstituted benzene and toluene groups and

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and R<sup>2</sup>, R<sup>3</sup> and R<sup>4</sup> are independently selected from alkyl groups having 1 to 8 carbon atoms, substituted and unsubstituted benzene and toluene groups, and –OSiR<sup>5</sup>R<sup>6</sup>R<sup>7</sup> wherein R<sup>5</sup>, R<sup>6</sup> and R<sup>7</sup> are independently selected from the group consisting of straight or branched alkyl groups having 1 to 4 carbon atoms.

- 8. The polymer of claim 7 wherein said at least one hydrophilic monomer comprises at least one polymerizable double bond and at least one hydrophilic functional group.
- 9. The polymer of claim 7 wherein said at least one hydrophilic monomer is selected from the group consisting of hydrophilic vinyl-containing monomers, polyoxyethylene polyols, vinyl carbonate monomers, vinyl carbamate monomers, oxazolone monomers, and mixtures thereof.
  - 10. The polymer of claim 7 wherein said at least one hydrophilic monomer is selected from the group consisting of N,N-dimethyl acrylamide, 2-hydroxyethyl acrylate, 2-hydroxyethyl methacrylate, glycerol methacrylate, 2-hydroxyethyl methacrylamide, N-vinylpyrrolidone, and polyethyleneglycol monomethacrylate.
  - 11. The polymer of claim 7 wherein said at least one hydrophilic monomer is selected from the group consisting of 2-hydroxyethyl methacrylate, N,N-dimethyl acrylamide, N-vinylpyrrolidone and mixtures thereof.
- 12. The polymer of claim 7 wherein said at least one hydrophilic monomer is present in amounts between about 10 to about 60 weight% based upon the weight of all reactive components.
- 13. The polymer of claim 7 wherein said at least one hydrophilic monomer is present in an amount between about 15 to about 50 weight % based upon the weight of all reactive 'components.
- 14. The polymer of claim 7 wherein said at least one hydrophilic monomer is present in an amount between about 20 to about 40 weight % based upon the weight of all reactive components.

- 15. The polymer of claim 7 wherein said silicone containing component is selected from the group consisting of silicone macromers, prepolymers and monomers.
- 16. The polymer of claim 15 wherein said silicone containing component is a silicone macromer selected from the group consisting of polydimethylsiloxane methacrylated with pendant hydrophilic groups, polydimethylsiloxane macromers with polymerizable functional group(s), polysiloxane macromers incorporating hydrophilic monomers, macromers comprising polydimethylsiloxane blocks and polyether blocks, silicone and fluorine containing macromers and combinations thereof.

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- 17. The polymer of claim 15 wherein said silicone containing component is a silicone monomer selected from the group consisting of tris(trimethylsiloxy)silylpropyl methacrylate, hydroxyl functional silicone containing monomers, amide analogs of TRIS, vinylcarbamate analogs, vinyl carbonate analogs, monomethacryloxypropyl terminated polydimethylsiloxanes, polydimethylsiloxanes and mixtures thereof.
- 18. The polymer of claim 15 wherein said silicone containing component is a silicone monomer selected from the group consisting tris(trimethylsiloxy)silylpropyl methacrylate, mPDMS and combinations thereof.
  - 19. The polymer of claim 7 further comprising at least one internal wetting agent.
- 20. The polymer of claim 19 wherein said internal wetting agent comprises at least one high molecular weight hydrophilic polymer.
- 21. The polymer of claim 20 wherein said high molecular weight hydrophilic polymer is selected from the group consisting of polyamides, polylactones, polylactones, polylactones, polylactones, polylactones, polylactones, functionalized polylactams, hydrophilic prepolymers, and combinations thereof.
- 22. The polymer of claim 20 wherein said high molecular weight hydrophilic polymer is selected from the group consisting of poly-N-vinyl pyrrolidone, poly-N-vinyl-2-piperidone, poly-N-vinyl-2-caprolactam, poly-N-vinyl-3-methyl-2- caprolactam, poly-N-vinyl-4-methyl-2-piperidone, poly-N-vinyl-4-methyl-2-piperidone, poly-N-vinyl-3-ethyl-2-pyrrolidone, and poly-N-vinyl-4,5-dimethyl-2-pyrrolidone, polyvinylimidazole, poly-N-N-dimethylacrylamide, polyvinyl alcohol,

polyacrylic acid, polyethylene oxide, poly 2 ethyl oxazoline, heparin polysaccharides, polysaccharides, mixtures and copolymers thereof.

23. The polymer of claim 20 wherein said high molecular weight hydrophilic polymer comprises poly-N-vinylpyrrolidone.

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- 24. The polymer of claim 20 wherein said high molecular weight hydrophilic polymer is present in an amount between about 1 to about 15 weight percent based upon the total of all reactive components.
- 25. The polymer of claim 20 wherein said high molecular weight hydrophilic polymer is present in an amount between about 3 to about 15 percent, based upon the total of all reactive components.
- 26. The polymer of claim 7 wherein said reaction mixture further comprises additional components selected from the group consisting of crosslinking agents, photoinitiators, diluents, UV absorbers, medicinal agents, antimicrobial compounds, reactive tints, pigments, copolymerizable and nonpolymerizable dyes, release agents and combinations thereof.
- 27. A composition selected from the group consisting of N-(2-hydroxy-3-(3-(bis(trimethylsilyloxy)methylsilyl)propyloxy)propyl) acrylamide; N,N-bis[2-hydroxy-3-(3-(bis(trimethylsilyloxy)methylsilyl)propyloxy)propyl] acrylamide; N-(2-hydroxy-3-(3-(tris(trimethylsilyloxy)silyl)propyloxy)propyl)-2-methyl acrylamide; N-(2-hydroxy-3-(3-(tris(trimethylsilyloxy)silyl)propyloxy)propyl)acrylamide; N,N-bis[2-hydroxy-3-(3-(tris(trimethylsilyloxy)silyl)propyloxy)propyl]2-methyl acrylamide; N,N-bis[2-hydroxy-3-(3-(tris(trimethylsilyl)propyloxy)propyl] acrylamide; N-[2-hydroxy-3-(3-(t-butyldimethylsilyl)propyloxy)propyl] acrylamide; N,N-bis[2-hydroxy-3-(3-(t-butyldimethylsilyl)propyloxy)propyl] acrylamide; N,N-bis[2-hydroxy-3-(3-(t-butyldimethylsilyl)propyloxy)propyl] acrylamide; N,N-bis[2-hydroxy-3-(3-(t-butyldimethylsilyl)propyloxy)propyl] acrylamide.

## 28. A polymer comprising at least one group of the formula:

$$\begin{array}{c|c}
 & O \\
 & N \\
 & R^1 & OH
\end{array}$$
SiR<sup>2</sup>R<sup>3</sup>R<sup>4</sup>

wherein R is H or CH<sub>3</sub>, R<sup>1</sup> is selected from H, substituted and unsubstituted alkyl groups having 1 to 8 carbon atoms, substituted and unsubstituted benzene and toluene groups and

and R<sup>2</sup>, R<sup>3</sup> and R<sup>4</sup> are independently selected from alkyl groups having 1 to 8 carbon atoms, substituted and unsubstituted benzene and toluene groups, and -OSiR<sup>5</sup>R<sup>6</sup>R<sup>7</sup> wherein R<sup>5</sup>, R<sup>6</sup> and R<sup>7</sup> are independently selected from the group consisting of straight or branched alkyl groups having 1 to 4 carbon atoms.